

usually accompanied by swelling (edema), the result of fluid leaving the damaged blood vessels and accumulating in the tissue. If the swelling is severe, blisters form. Avoidance of the irritating material is not always practical so that protection becomes the best therapeutic approach. Hair preparations in general, including hair dyes, relaxants and waving preparations are responsible for a large number of allergic states. As for the types of ingredients that cause the allergic reactions, fragrances are responsible for the greatest number, preservatives are next followed by phenylenediamine found in hair dyes, and the hair waving ingredient glyceryl monothioglycolate can be mentioned.

In addition to the irritating and allergy inducing potential of these chemicals is the additional propensity for the dyes and to tints used to stain the face, ears and necks of the individual whose hair color is being altered.

Heretofore headbands made of woven or non woven materials have been used as barrier materials such as petroleum jelly and the like.

Although there have been advances in the protection of skin from the harmful effects of cosmetics, the harmful effects of such hair cosmetics applications continues unabated; this becomes apparent in the warning labels on all hair coloring preparations as well as other hair cosmetics. Barrier creams, ointments and gels that protect the skin from chemicals, water soluble chemicals, as well as chemicals soluble in oil represent the preferred preventative treatment. The need for a barrier composition that is readily applied, easily removed, without unacceptable odor or texture, and that is consumer and professionally acceptable, is readily apparent. Many of the commercially available topical barrier formulations or those prepared by cosmetologists in their own establishments consist of an oil based carrier such as; petrolatum or liquid petrolatum which are insoluble in water. Such compositions tend to be greasy, tacky, often difficult to remove and may permanently stain clothing.

Accordingly, it is an object of the present invention to provide compositions for topical application to the skin providing a barrier for toxic agents utilized in the hair dressing industry, which are readily removable with water.

Alcohol (denatured with tert. butyl alcohol)

Brucine sulfate

Water

Cream

a) Stearic acid

Isopropyl myristate

Polyoxyl 40 stearate

Xanthum gum

Ascorbic acid

Butylated hydroxy toluene

Water

b) White petrolatum

Isopropyl myristate

Lanolin alcohols

Mineral oil

Ceto stearyl alcohol

Aluminum stearate

Eddate disodium

Lactic acid

Magnesium stearate

Water

It was not known heretofore to combine the barrier protectant composition with a surfactant and preferably a lathering surfactant to facilitate removal of the barrier

proteins and mixtures thereof. Examples of these materials include carboxymethyl hydroxy carboxymethylcellulose, carboxymethylhydroxypropyl guar, carrageenan, cellulose gum, gelatin, guar gum, hydroxyethylcellulose, hydroxypropyl cellulose etc.

To any of the protective compositions, one or combinations of several biologic agents may be incorporated. These are both to protect as well to enhance the physiologic condition of the skin to which the composition is being applied. Such agents could include vitamins, proteins (hydrolyzed), complex carbohydrates such as hyaluronic acid, antioxidants and plant products. Examples of such biologically active agents include: Vitamins A, B6, C, D2 and D3, E, panthenol, aloe vera, grape seed extract, hydrolyzed casein, hydrolyzed collagen, and a wide variety of other hydrolyzed animal and vegetable proteins. The hydrolyzed proteins should be in segments having molecular weights from 1000 to 5000. Complex mucopolysaccharides and some of the products produced by hydrolysis of the mucopolysaccharides e.g. hyaluronic acid, chondroitin sulfuric acid and their constituent amino sugars (glucosamine and galactosamine) All of the above agents have a wide variety of pharmacologic actions. These include antioxidant activity, reduction of inflammation, and improvement and extension of cellular viability.